

Application No. 10/713,270
Reply dated June 15, 2005
Responsive to Office Action dated December 16, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-32. (cancelled)

33. (previously presented) An integrated air flow sensor comprising:
a body forming a passage,

a flow rate detection means which detects the air flow rate which flows in said passage,

a throttle means controlled by an electric signal, which limits said air flow rate by reducing the flow, said body, said flow rate detection means and said throttle means being integrated, and

a means which integrates the air flow rate signal of said flow rate detection means when a reduction rate of an amount of reduction by said throttle means is less than a fixed value.

34. (previously presented) The integrated air flow sensor according to claim 33, further comprising a microcomputer integrated with said integrated air flow sensor, wherein the integral operation is carried out by software of said microcomputer.

35. (previously presented) An integrated air flow sensor comprising:
a body forming a passage,

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a flow rate detection means which detects the air flow rate which flows in said passage,

a throttle means controlled by an electric signal, which limits said air flow rate by reducing the flow, said body, said flow rate detection means and said throttle means being integrated, and

a means which integrates the air flow rate signal of said flow rate detection means according to a reduction rate of an amount of reduction by said throttle means.

36. (previously presented) The integrated air flow sensor according to claim 35, further comprising a microcomputer integrated with said integrated air flow sensor, wherein the integral operation is carried out by software of said microcomputer.

37. (previously presented) An integrated air flow sensor comprising:
a body forming a passage,
a flow rate detection means which detects the air flow rate which flows in said passage,

a throttle means controlled by an electric signal, which limits said air flow rate by reducing the flow, said body, said flow rate detection means and said throttle means being integrated, and

a plurality of integrators which integrates the air flow rate signal of said flow rate detection means,

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wherein said integrator is selected according to a reduction rate of an amount of reduction by said throttle means.

38. (previously presented) The integrated air flow sensor according to claim 37, further comprising a microcomputer integrated with said integrated air flow sensor,

wherein the integral operation is carried out by an integrator and software of said microcomputer.

39. (previously presented) The integrated air flow sensor according to claim 38, wherein the reduction rate of an amount of reduction by said throttle means is obtained based on a signal from an opening sensor for detecting the opening of said throttle means or a signal from an accelerator pedal sensor for detecting the opening of an accelerator pedal.

40. (previously presented) An integrated air flow sensor comprising:
a body forming a passage,

a flow rate detection means which detects the air flow rate which flows in said passage,

a throttle means controlled by an electric signal, which lim its said air flow rate by reducing the flow, said body, said flow rate detection means and said throttle means being integrated, and

an integrator which integrates the air flow rate signal of said flow rate detection means,

wherein the air flow rate signal is directly output by by-passing said integrator when a reduction rate of an amount of reduction by said throttle means is more than a fixed value.

41. (previously presented) An integrated air flow sensor comprising:
a body forming a passage,

a flow rate detection means which detects the air flow rate which flows in said passage, and

a throttle means controlled by an electric signal, which limits said air flow rate by reducing the flow, said body, said flow rate detection means and said throttle means being integrated;

wherein the air flow rate signal of said flow rate detection means is addition-amended and output when a reduction rate of an amount of reduction by said throttle means is more than a fixed value.

42. (previously presented) The integrated air flow sensor according to claim 41, wherein said addition amendment is carried out through differentiators.

43. (previously presented) The integrated air flow sensor according to claim 42, wherein said differentiators have differential constant with one another, and wherein said differentiator is selected according to an opening rate of said throttle means or an opening rate of said accelerator pedal.

44. (previously presented) The integrated air flow sensor according to claim 41, wherein said addition amendment is carried out through adders.

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45. (previously presented) The integrated air flow sensor according to claim 44, wherein said adders have differential constant with one another, and wherein said adders is selected according to an opening rate of said throttle means or an opening rate of said accelerator pedal.

46. (previously presented) The integrated air flow sensor according to claim 41, further comprising a microcomputer integrated with said integrated air flow sensor, wherein said addition amendment is carried out by software of said microcomputer.

47-54. (cancelled)